

# Work Order ID 82851

**\*82851\***

Page 1

April-10-12 2:27:34 PM

Item ID: D2563

Accept

**\*N900040100\***

Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Step Weldment Assembly

Start Date: 10/04/2012 Start Qty: 5.00

**\*5\***

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 5.00

**\*5\***

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/04/10 Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D2563	Rev C								

100

0.00

**\*100\***

Large Fab

Large Fab

Memo

0.00

Large Fab

1-Cut D2244 to 89.70" at 34 deg as per dwg D2563 ✓

2-Deburr ends ✓

3-Weld (1 END CAP, LUG PLATES & MOUNTING ANGLE) as per dwg D2563 using DT 8343

4- Grind

*Alum. Rod # m120169 m11985 m120864*

110

QC9- Inspect visual per QSI004- Fusion Welds

0.00

**\*110\***

QC

Memo

0.00

Quality Control

*5 0 12.04.23*

*12.04.23*

*5 0 12.04.23*

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 82851

**\*82851\***

Page 2

April-10-12 2:27:34 PM

Item ID: D2563

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Step Weldment Assembly

Stop

**\*NS2\***

Start Date: 10/04/2012 Start Qty: 5.00

**\*5\***

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 5.00

**\*5\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

120

QC5- Inspect part completeness to step on W/O

0.00

**\*120\***

QC

Memo

0.00

Quality Control

130

Chemical Conversion Coat per QSI005 4.1

0.00

**\*130\***

HandFinish

Memo

0.00

Hand Finishing

140

QC3- Inspect Part Finish

0.00

**\*140\***

QC

Memo

0.00

Quality Control

(5)

(5)

7/6/12-4-23

5 of 12-04-23

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 82851

**\*82851\***

Page 3

April-10-12 2:27:34 PM

Item ID: D2563

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Step Weldment Assembly

Stop

**\*NS2\***

Start Date: 10/04/2012 Start Qty: 5.00

**\*5\***

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 5.00

**\*5\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

150

Weld per dwg A/R Aluminum rod Batch: 119785

0.00

**\*150\***

Large Fab

Memo

0.00

Large Fab

1-Inspect for foreign object per QSI 024

2-Weld Remaining End cap as per Dwg D2563 using DT 8343

3-Grind

5

φ

ll  
12.04.24

ke  
12.04.24

160

QC10- Inspect visual per QSI004- ground welds

0.00

**\*160\***

QC

Memo

0.00

Quality Control

Sizkub

170

QC5- Inspect part completeness to step on W/O

0.00

**\*170\***

QC

Memo

0.00

Quality Control

Sizkub

(75)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

**Work Order ID 82851****\*82851\***

Page 4

April-10-12 2:27:34 PM

Item ID: D2563

Accept

**\*N900040100\***Setup Start **\*NS1\***

Revision ID:

Stop **\*NS2\***

Item Name: Step Weldment Assembly

Start Date: 10/04/2012 Start Qty: 5.00

**\*5\***

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 5.00

**\*5\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start **\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop **\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

175

Pressure Wash per QSI005 4.3

0.00

**\*175\***

HandFinish

Memo

0.00

Hand Finishing

Touch up Alodine as per QSI005

(5) 7/6/24/26

180

White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum

0.00

**\*180\***

Powdercoat

Memo

0.00

Powder Coating

Touch up Alodine then

Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

2:10 OF  
320  
2:40

SX 0 M-L 12/04/26

190

Wing Walk as per dwg QSI005 4.4 Batch 130959

**\*190\***

HandFinish

Memo

0.00

Hand Finishing

5 0 12.4.27

M121134

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



# Work Order ID 82851

**\*82851\***

Page 5

April-10-12 2:27:34 PM

Item ID: D2563

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Step Weldment Assembly

Start Date: 10/04/2012 Start Qty: 5.00

**\*5\***

Cust Item ID:

Required Date: 24/04/2012 Req'd Qty: 5.00

**\*5\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/  
Work Center ID

Operation  
Description

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
Code

Accept  
Qty

Reject  
Qty

Reject  
Number

Insp.  
Stamp

200

QC3- Inspect Part Finish

0.00

**\*200\***

QC

Memo

0.00

Quality Control

5.X 6 H n100122

210

Identify as per dwg & Stock Location: PPP

0.00

**\*210\***

Packaging

Memo

82838

0.00

Packaging

444/30 8

220

QC21- Final Inspection - Work Order Release

0.00

**\*220\***

QC

Memo

0.00

Quality Control

12/5/2 JD

ME 12-052

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-10-12 2:27:38 PM

Page 1

Work Order ID: 82851

\*82851\*

Parent Item: D2563

\*D2563\*

Parent Item Name: Step Weldment Assembly

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev:G 02.07.31 Re-format Location RF

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2244-116		Manufactured	No			100	Each	95.5000	1	5			
*D2244-116*									**			12.04.19	
Step Extrusion													

Location	Loc Qty	Loc Code
HALL	2.5	
60307	2.5	
WA	93	
80803	93	

D2561	Manufactured	No	100	Each	38.0000	2	10
-------	--------------	----	-----	------	---------	---	----

\*D2561\*

Lug

\*\*

Location	Loc Qty	Loc Code
WA	24	
80813	24	
WA015	14	
66813	5	
74534	9	

D2564	Manufactured	No	100	Each	16.0000	2	10
-------	--------------	----	-----	------	---------	---	----

\*D2564\*

Mounting Angle

\*\*

Location	Loc Qty	Loc Code
WA018	16	
71591	16	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Picklist Print

April-10-12 2:27:38 PM

Page 2

Work Order ID: 82851

**\*82851\***

Parent Item: D2563

**\*D2563\***

Parent Item Name: Step Weldment Assembly

Start Date: 10/04/2012

Required Date: 24/04/2012

Start Qty: 5.00

Required Qty: 5.00

D2673-34

Manufactured No

100

Each

50.0000

1

5

**\*D2673-34\***

End Plate

\*\*

12.04.19

Location

Loc Qty

Loc Code

WA

B69534

30

81468

30

WA015

20

59690

20

1/2

D2673-34

Manufactured No

150

Each

50.0000

1

5

**\*D2673-34\***

End Plate

\*\*

12.04.24

Location

Loc Qty

Loc Code

WA

81468

30

81468

30

WA015

20

59690

20

5

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

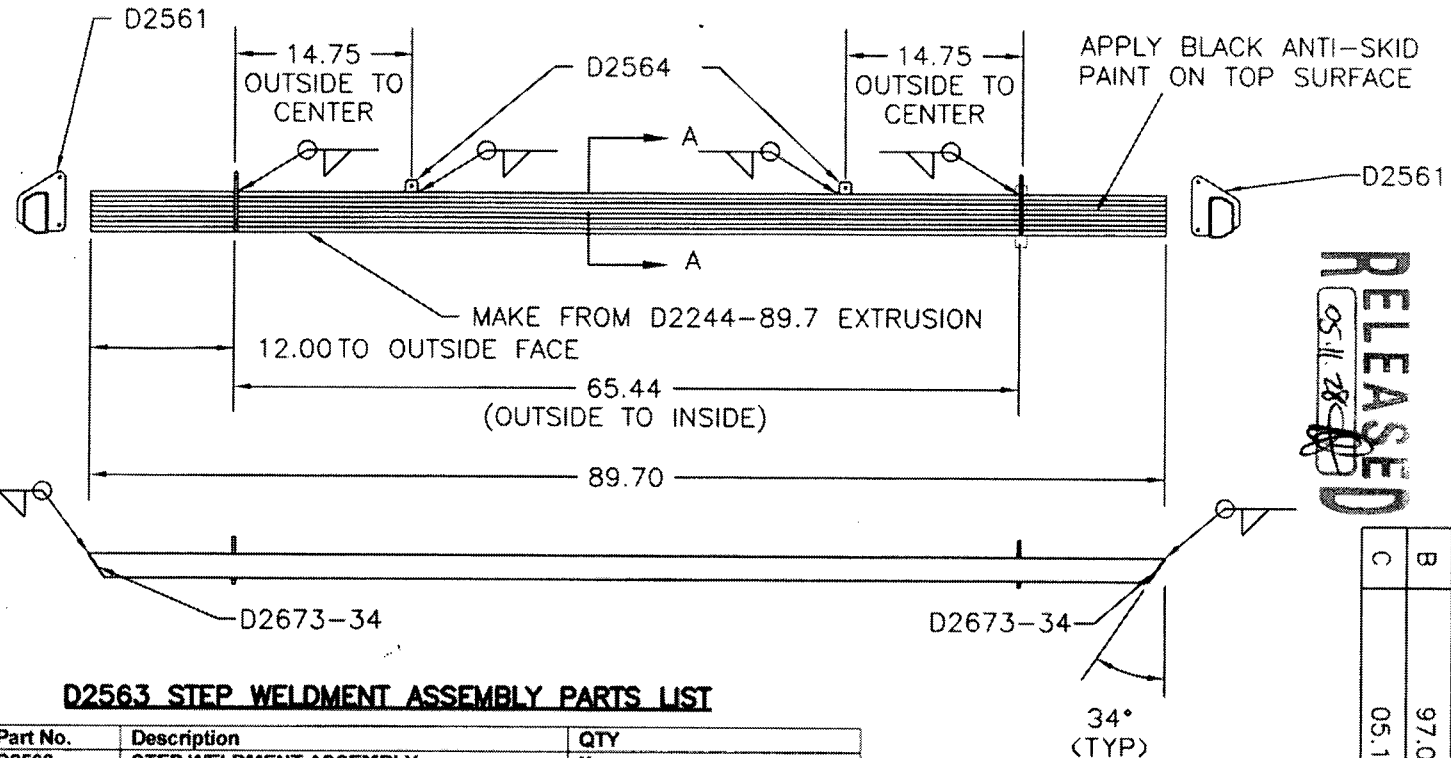
Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



RELEASED  
05.11.28

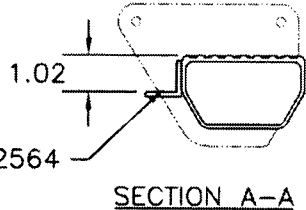


**D2563 STEP WELDMENT ASSEMBLY PARTS LIST**

Part No.	Description	QTY
D2563	STEP WELDMENT ASSEMBLY	X
D2244-89.7	EXTRUSION*	1
D2561	LUG PLATE	2
D2564	MOUNTING ANGLE	2

\*cut per drawing

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY D2564  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 82851 MCT  
12/04/10



**D2563 STEP WELDMENT ASSEMBLY NOTES**

- 1) MAKE FROM EXTRUSION D2244
- 2) WELD PER DART QSI 004
- 3) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT ASSEMBLY WHITE (4.3.5.1) PER DART QSI 005 4.3  
MASK OFF 0.50 ON EACH SIDE OF D2561 LUGS BEFORE  
APPLYING BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

DESIGN	DRAWN BY	DART AEROSPACE LTD
BW	pt	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
		D2563
DATE	TITLE	REV. C
05.11.14	STEP WELDMENT ASSEMBLY	SHEET 1 OF 1
A	96.04.26	NEW ISSUE
B	97.05.14	END CAPS CHANGED (WAS D2248)
C	05.11.14	UPDATE NOTES
		SCALE 1:15

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.

Copyright © 1996 by DART AEROSPACE LTD